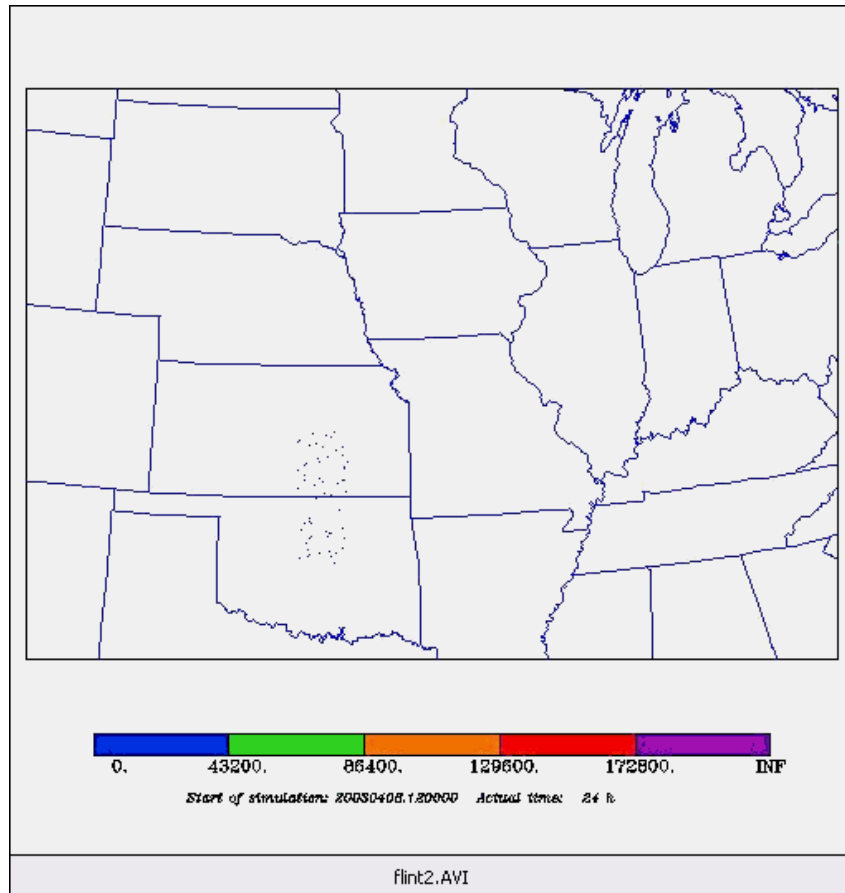


# New and Emerging Model Technology for the Regulatory Model Community

# Classes of Models

- Gaussian Plume Models (ISC, AERMOD)
- Gaussian Puff Models (INPUFF, CALPUFF, SCIPUFF)
- Lagrangian Particle Models (KSP, HYSPLIT, FLEXPART)
- Computational Fluid Dynamics (CFD) (FLUENT, OPENFLOW)
- Eulerian Models (CMAQ, CAMx)
  - Plume-in-Grid
  - Single Source Apportionment Techniques

# Lagrangian Particle Model In Action at EPA



- LPDM used for fire forecast simulations in the Kansas Flint Hills.
- Example: EPM fire emissions model and MM5 met model linked to FLEXPART.